

## **October 22, 2020 - Fresh Pond Reservation Master Plan Advisory Board Meeting Minutes**

(conducted via Zoom)

Submitted: Sam Corda – March 18, 2021

### **Advisory Board Members in Attendance:**

Janice Snow (Chair), David Kaplan, Janet Burns, Deborah Masterson, Claudia Thompson, Sophia Emperador, Ann Roosevelt, David Lyons, Jennifer Letourneau, Adam Corbeil, Candace Young and Susan Agger

### **Advisory Board Members Not in Attendance:**

Jim Barton

### **Water Department in Attendance:**

Sam Corda, Ed Dowling, Jean Rogers, Tim Puopolo, Fred Centanni and Vincent Falcione

### **Others in Attendance:**

Duke Bitsko, Andrew Keel, Ken Wagner and Ben Griffith – Blacks Nook Presentation; Kathleen Kelly, Water Board; Josephine Mulian, Resident; Mark Breneman, Resident; Ken Vorspan, Resident

Meeting opened at 6:01 pm

Meeting Minutes: S. Corda

### **Item 1: Review Agenda**

There were no adjustments to the agenda

### **Item 2: Meeting Minutes**

Deborah Masterson moved, and Janet Burns seconded the motion to approve the November 21, 2019 minutes as amended. The vote was unanimous in favor of the motion.

Deborah Masterson moved, and Sophia Emperador seconded the motion to approve the January 23, 2020 minutes as amended. The vote was unanimous in favor of the motion.

### **Item 3: Presentation: Black's Nook Pond Limnology & Environs Assessment**

Duke Bitsko of Hatch, lead restoration consultant; Ken Wagner, Ph.D. limnologist; and Ben Griffith, wildlife scientist at Normandeau Associates gave a presentation on their limnology and environmental assessment of Black's Nook pond and border lands ecology. Bitsko presented a summary of the group's assessment approach. Griffith showed results of Normandeau studies in the fall of 2019 and spring of 2020 of pond fish and invertebrate species as well as area bats, birds and amphibians as keys to assess the potential impacts of in-water restoration. Wagner presented in-pond study data including the nature of the sediment from shallow and deep probes, plankton and aquatic vegetation sampling and chemical analysis to assess current water quality. The five rehabilitation opportunities suggested ranged from doing nothing to extensive dredging. At the January 2021 Board meeting the group will present strategies and potential costs for reducing eutrophication of the Pond and achieving the Master Plan goals of restoring Black's Nook as a Class B open water resource.

See the link below to view the presentation.

[https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Agendas/2020/Oct\\_FPAB\\_BN\\_10212020.pdf](https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Agendas/2020/Oct_FPAB_BN_10212020.pdf)

There were many comments, questions and answers. Wagner noted that zooplankton is often overlooked in pond assessments but were sampled here as key to assessing the health of the fishery and other pond species. Phosphorous in pond sediment and internal cycling impacts in the water column were discussed. Aquatic plants in Black's Nook are a major problem contributing to eutrophication. The invasive and extensive Indian lotus is relatively new (< 10 years). No American Toads had been found. Wagner concluded that the peat from probe cores is very old.

Ken Wagner suggested that an option would be to dredge the top 12-18" of sediment mainly soft muck which would remove all of the plants and improve the pond. Jen Letourneau expressed concern over the short-term impacts of ecosystem disruption from dredging and agreed and that it could be done with the least impact over the Winter.

Janice Snow was concerned with the potential for altering the balance of nitrogen and phosphorous in the water column which could lead to the growth of toxic cyanobacteria (formerly referred to as blue green algae) species relative to other microscopic species. She also asked where the dredged material might go. Wagner noted that DEP can be "unfriendly" with dredging, but it is possible to perform additional sampling if needed to determine what would be required to dispose of it offsite or relocate the dredged materials within the Reservation.

#### **Item 4: Multi-use Path Status of DOT Construction and Right of Way Planting**

Jen Letourneau gave the Board an update on the DCR Greenway progress. She stated that the project was significantly delayed due to many site conditions outside the Reservation had not been investigated prior to the path design such as: 1) the Eversource lines in Watertown, 2) existing water lines not shown on drawings, 3) poorly draining soils, 4) unaccounted for stormwater flows (Watertown and Cambridge), and 5) tree conflicts with path alignment and drainage systems. These path segments required significant redesign to prevent the path from flooding during high intensity storms. The redesign included the installation of a detention basin (adjacent to Aberdeen Lofts) and infiltration units (Holworthy Place). The work to be completed in Cambridge outside the Reservation includes: 1) final grading and paving of the path, 2) installing the capstone and fence (Holworthy Street ramp), 3) installing the lights under the Mount Auburn bridge, 4) installing all remaining trees and plantings, 5) completing all ramps, crosswalks, line striping, and signage, and 6) installing the benches.

Work inside the Reservation to be completed includes final surface paving and installation of trees and understory. No benches are planned in the Reservation section. Janice asked if DCR/DOT contractors would follow the 9-2017 revised VHB Advisory Board approved planting plan for the Huron Forest section.

The detention basin at the Water Treatment Plant has been regraded and planted according to revised design approved by the City.

Janet Burns commented as to the origin of the planting plan for the drainage basin and the rest of the path. The current planting is dominated by Rhododendron and black, waste wood mulch, not the native shrubs and understory expected. She also asked about invasives' removal at the end of the project.

Dave Kaplan noted that when DCR/DOT leaves the Reservation, the Water Department will reassess vegetation conditions and consider improving as needed at the Treatment plant and incorporate the Forest path edge improvements as part of the future Pine Forest inventory and restoration plan.

#### **Item 5: Watershed Manager's Report**

Dave Kaplan recognized Vincent Falcione for the great job he is doing keeping Fresh Pond Reservation in pristine condition during the pandemic with the increased usage.

Duke Bitsko gave a presentation on the status of Glacken Slope phase 6, the proposed retrofit of the Little Fresh Pond access point and an assessment of and the Huron Avenue Pine Forest including the mix of tree and understory native plants and invasive species. Please see the link below to view the presentation.

[https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Agendas/2020/Oct\\_FPAB\\_LFP\\_10222020.pdf](https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Agendas/2020/Oct_FPAB_LFP_10222020.pdf)

The Glacken Slope project is 98% complete. Invasives have been removed, the slope stabilized, soils corrected, and native restoration plantings installed. The Blacks Nook and Huron Avenue Pine Forest projects will move forward based on priority and Department capital funding availability.

Vinnie Falcione reported that Essex Horticultural is continuing to remove invasives on the pond shoreline/perimeter path. He also mentioned that we have planted replacement shrubs from the plant list at Black's Nook. Those previously planted did not survive because of a soil issue.

#### **Item 6: Glacken Field Issues**

Janice Snow sent the e-mail below defining the timeline and issues relating to the lighting of Glacken Field.

**From:** J. Snow

**Sent:** Thursday, October 22, 2020 4:44 PM

**To:** Corbeil, Adam; Ann Roosevelt; Deborah Masterson; Claudia Thompson; David Lyons; Kaplan, David; Janet Burns; Letourneau, Jennifer; Janice Snow; Jim Barton; Susan Agger; Sam Corda; Sophia Emperador; Candace Young

**Subject:** Time line & light pole images for Agenda Item 6

*Item 6: Glacken Field Lights Timeline as of 10-22-20*

*Sept 19, 2019 Advisory Board meeting: Report that DPW was to reconfigure Glacken for temporary ball fields while Tobin school was rebuilt.*

Nov 21, 2019 Advisory Board meeting: Presentation by Kara Felice and Kathy Watkins was the first indication that baseball fields at Glacken would be permanent and youth soccer would move to Danehy. Board agreed there should be no lighting of the fields given the effect on the restored adjacent native woodlands.

Jan 23, 2020 Special Meeting on Glacken: DPW's Kara Felice told us that there would be no lighting installed on the fields. The voted unanimously to "exclude any lighting on the planned Glacken Field Restoration Project."

February 13, 2020 Community Information Session at Haggerty School on Glacken: David Kaplan, Adam Corbeil and I attended. Former Councilor Galluccio and two Little League coaches asked me if there were any compromises to enable them to double up on one field until their 3rd field at Tobin was rebuilt. I suggested that they investigate portable field lights since they would need them only for such a short period of time. (Tobin's rebuilt Callahan Park will have one ball field, returning a total of 3 to West Cambridge with Glacken's two.)

February 24, 2020 City Council Meeting Vote on Lighting  
With no prior notice a Council member presented an order to approve lighting at Glacken Field. I was informed during the meeting by Kathy Watkins that vote was occurring. I have been told that the Council was not informed of the Advisory Board's vote/objections and any detail as to the type of lights or alternatives.

February 25, 2020 Phone call with City Manager Louis DePasquale  
The Manager told me he was blindsided by the order, that he did not think field lights were essential. We discussed portable lighting alternatives as a compromise. He said he would like try to attend our March 19 Board meeting.

March 10, 2020 afternoon: I emailed Kathy Watkins who was scheduled to attend our March 19 meeting to discuss alternative lighting options and to answer several questions about Little League usage, short and long term needs.

March 10, 7:20 pm: I received the following response from Kathy Watkins on how much time she would like to discuss lighting, etc. She responded "Hi, I think 30 minutes would be great. I'll reach out to baseball to see about getting answers to your questions about the little league participants."

March 10, 2020 Water Board Meeting  
Kathy did **not** mention that earlier, on March 10<sup>th</sup>, DPW had presented the original field lighting plan to the Water Board for their approval. On slide 18 of the full presentation, the right-hand column lists 6 Advisory Board recommendations; the third is, "excluded athletic field lights." A majority of those in attendance voted for those lights. A Water Board member later told me that no mention was made of the portable light option.

March 13, 2020: City Manager cancels all non-essential public meetings.

June 8, 2020 DPW email to those who have signed up to receive project notifications  
As of June 5th work was starting on the construction process for the field.

On June 9, 2020

*I emailed Kathy asking once again for a "response to these question I raised on March 10 and any information on DPW's investigation of portable field lights.*

*June 17, 2020 email response from Kathy Watkins*

*She began her email, "Hi, thanks for reaching out. We are excited to see the project, including the slope restoration work and the removal of the bleachers, underway."*

*She noted that the "Water Board had approved the overall design, including the permanent light pole plan on March 10. She attached a copy of the March 10 Water Board Presentation.*

*I never received a response to my March 10 questions to Kathy.*

*June 24, 2020:* *My email to Board members detailing these events and options for a response.*

*September 2020:* *See attached photo of light poles extending installed well above mature trees at Glacken slope*



Ann Roosevelt stated that the lighting was approved at the October 2020 Water Board meeting and that this complied with the requirements of the Master plan which allow lighting at Glacken field. She also mentioned that the lights must be turned off at 9:00pm.

Candace Young and Adam Corbeil mentioned that the light would most likely only be needed in the spring and fall.

The sidewalk that is proposed for Huron Avenue, from Glacken Field to Fresh Pond Parkway, was then discussed. Ann Roosevelt stated that the sidewalk maximum width be 5', we use the least amount of Reservation property as possible and the Bike path be moved into the street right of way.

Water Board member Kathleen Kelly feels that there should not be a sidewalk placed within the reservation under any condition.

Adam Corbeil commented that parking for the older community was not represented.

#### **Item 7: Pat Pratt Memorial Grove Proposal**

Janice noted that Pat Pratt, was a member of the Master Plan Committee that wrote the Master Plan we have followed since 2000. Pat was singularly important as a member of the Cambridge Plant and Garden Club (CPGC) in promoting the restoration of the Reservation from neglect beginning in the 1960s with Black's Nook which had become an illegal dump and later with CPGC funding to replant other Reservation areas. She later worked over two decades to encourage the City to establish a Reservation master planning process to create a long-term landscape restoration plan. The Fresh Pond Master Plan Advisory Board should develop a proposal/plan for a Memorial Grove to honor Pat Pratt and a Board committee established to propose sites.

Janice Snow moved and Ann Roosevelt seconded the motion to have a Pat Pratt Memorial Grove established. The vote was unanimous in favor of the motion.

#### **Item 8: Naming and Signage Plans/Issues: Temporary and Permanent**

At the January 2021 meeting it was suggested that we re-establish the signage committee to discuss specifically temporary signage for Black's Nook, the Water Treatment Plant and the Huron Avenue Pine Forest. We also need to review the pathway signage and detour signage.

#### **Item 9: Reservoir Shoreline Fencing**

Sam Corda and Dave Kaplan discussed the plan and need for fencing as described and required in the below plan which includes Cambridge Ordinances, Code of Massachusetts Regulations (CMRs), Fresh Pond Reservation Master Plan (FPMP) and American Society of Civil Engineers/American Water Works Association (ASCE/AWWA) draft American National Standard (ANS).

### **FRESH POND RESERVATION FENCE PLAN**

October 8, 2020

The fencing of Fresh Pond is required to protect the drinking water and shoreline from degradation. [W]hen an area is renovated, the perimeter path, fencing and water's edge are reviewed for improvements as well.

The approach to determining if the reservoir fence should be lowered to the 4' minimum or to the max height of 6' is [to assess] the specific location on the Reservation, past issues if any, and general visibility of the location for enforcement of the many rules and regulations preventing access to the water and shoreline for the protection of the water supply.

Several examples: 1) Glacken Slope Phase 5, where the eroded slope, the perimeter path, fence and shoreline were all restored. In this case the fence was lowered to 6' because of its location and use. 2) Weir Meadow where the fencing was lowered to 5' and the Perimeter path was elevated resulting in a clear view of the Pond. 3) Drainage and Community Garden Project where the Perimeter Road was relocated over the railroad bed to cap it, as required by MADEP, and to allow for proper storm water drainage control adjacent to the water's edge. Water quality and flooding prevention were the reasons for the restoration. Here we were able to lower the fence to 4' and 6' depending on the specific fence location. 4) Lusitania Meadow where the fence was

lowered from 7' to 6' along the shoreline of Fresh Pond. 5) Little Fresh Pond where the fence was lowered from 6' to 5' along the reservoir.

In all cases the vista, aesthetics and user experience were significantly improved while improving our water supply system – which is our primary goal.

Fresh Pond Reservation projects, since the 90's, include many phases of design, vetted through public meetings where constituents review and make comments and suggestions. All outside input is reviewed and considered for additions or changes to the design.

The following is a list of references relating to the protection of Fresh Pond and the Reservation via the use of various types of fencing:

***Cambridge Ordinance:*** 13.12.010 – Established – Fishing or Swimming

Fresh Pond, Stony Brook and Hobbs Brook are constituted reservoirs, storage basins and water supplies for the use of the City. No person shall fish, swim or bathe, or intentionally permit any animal under his control to swim or bathe in Fresh Pond, Stony Brook or Hobbs Brook, or other reservoir of the water works or enter into the waters thereof, or place or use a boat in the same, or throw dirt, rubbish, filth, offensive or other foreign matter, or commit a nuisance therein, or on the land and driveways of the City connected therewith and appurtenances thereto.

(ord. 1151 (part), 1993: prior code SS 19-25)

***310 CMR 22.20B(6)***

No person shall swim, wade or bathe in any public surface water source and no person shall, unless permitted by written permit by the Board of Water Commissioners or like body having jurisdiction over such source, fish in; enter or go in any boat, seaplane, or other vehicle; enter upon the ice for any purpose, including the cutting or taking of ice; or cause or allow any animal to go into, or upon, any surface water source or tributary thereto.

***Fresh Pond Reservation Master Plan Chap 6, pg. 47:***

“The fence around the Reservoir has prevented the trampling of vegetation from becoming a problem on the shoreline. Most sections of the shoreline are heavily vegetated with trees, shrubs and vines that serve to reinforce bank and shoreline stability.”

***Fresh Pond Reservation Master Plan Chap 13(B) (4 & 5) Takeaways***

- “Permanent fencing is required at the Water Treatment Plant and around the Reservoir...”
- “Fencing and protective barriers within the Reservation should offer the least intrusive appearance, harmonizing with the natural aesthetics of the landscape while meeting reasonable long-term cost and durability requirements.”
- “The Reservoir shoreline fence has been erected to keep people and dogs out of Fresh Pond because it is our public water supply”...”The Reservation’s users must look through or beyond the shoreline fence to enjoy the Pond, its coves and shoreline”



- “Design criteria for the perimeter fence should reflect established City standards for durability of materials, ease of maintenance, and effectiveness of deterrence to animals and people”
- “The department should add appropriate additional criteria including minimizing the visual barrier created by the fencing.”
- “Effectiveness of deterrence should include a requirement that the fencing system be designed so as to prevent it from being undermined by dogs or people.”

***ASCE/AWWA Draft American National Standard for Trial Use “Guidelines for the Physical Security of Water Utilities” December 2006.***

[https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/documents/security/WISE-Phase3WaterUtilityGuidelines.pdf](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/security/WISE-Phase3WaterUtilityGuidelines.pdf)

### **Item 10: Public Comment**

Ken Vorspan discussed the many reasons why he sees no need for a fence:

- He has not seen any problems as he has walked around the pond over the last 25 years.
- About 50% of the existing fence is rusty and not in very good condition.
- The current fence is not aesthetically pleasing.
- The fence design shows a lack of imagination.
- Even though the Water Department has installed some lower fencing that is not in a person’s line of sight, Mr. Vorspan finds it an aesthetic hindrance to enjoying the pond.
- Seeing the water is soothing and comforting and any fence is an impediment.

He proposed that there should be a commitment to eliminate the fence or have all fencing 4 feet tall or lower. He also said that the entire fence should be replaced at one time and not be replaced by section.

Janice Snow disagreed and said that we need fences to protect the water supply. The minimum height should be 4 feet and taller as necessary. Ann Roosevelt agreed with Janice.

Jennifer Letourneau also agreed and mentioned that the recent fencing associated with the Drainage and Community Garden Project accommodated many needs and is an example of how the various fencing height needs are being implemented.

Tim Puopolo also agreed that the 7’ fence when replaced should be lowered and then the appropriate height used based on our experience in that area.

Ken Vorspan reiterated that there is no need for fencing and claimed that people and animals have no impact on water quality and that fencing for protecting the water supply is not a legitimate concern. He also stated that Ranger Jean is very vigilant and does a great job with teens and others to keep thing going well within the Reservation.

Dave Kaplan commented that we need 4’, 5’ and 6’ fencing around the pond based on incident history at various locations.

### **Item 11: Preliminary agenda and dates for next meetings**



The Board agreed to hold our next meeting on Thursday January 21, 2021. Topics will include Watershed Mangers Report, Project Updates, Golf Course Landscape Report and a discussion on the proposed sidewalk along Huron Avenue, from Glacken Field to Fresh Pond Parkway.

Ann Roosevelt moved, and Sophia Emperador seconded the motion to adjourn the meeting. The vote was unanimous in favor of the motion. The meeting was adjourned at 8:47pm.